

ABSTRACT OF THE DISCLOSURE

Sensing artifacts in cardiac signals picked up by electrical leads are reduced by placing an electrical shunting switch across the conductors of the ECG sensing leads and the stimulation leads that deliver a subthreshold electrical stimulation. In addition, impedance switches are placed in series with the sensing leads. The shunting switches and impedance switches are then manipulated to present cardiac signals that can be analyzed for diagnostic purposes within less than 100 ms from delivery of a subthreshold electrical stimulation.